

AMORPHOUS SELENIUM DETECTOR FOR TOMOTHERAPY AND OTHER IMAGE-GUIDED RADIOTHERAPY SYSTEMS

ABSTRACT

The present invention provides a detector for use in medical and industrial
5 applications for detecting high energy radiation, especially for use in tomotherapy and
other image-guided radiotherapy systems. The detector is preferably housed in an
enclosure. A plurality of detector elements are installed within the enclosure. The
detector elements preferably include a substrate, a readout electrode layer deposited on at
least one surface of the substrate, an amorphous selenium layer deposited on at least one
10 surface of the readout electrode layer, and a high voltage electrode layer deposited on at
least one surface of the amorphous selenium layer.

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